

PEDIATRICS

UNDER THE CHARGE OF

THOMPSON S. WESTCOTT, M.D., AND FREDERICK O. WAAGÉ, M.D.,
OF PHILADELPHIA.

Patent Ductus Arteriosus.—E. W. HALL (*Archives Middlesex Hospital* xxxi, 39) reports three cases of patent ductus arteriosus. The first child, aged two weeks, was attacked suddenly by cyanosis and cessation of breathing. On admission to hospital it appeared healthy. There was nothing to suggest organic disease, and no physical signs of any heart lesion were present. The child had several subsequent attacks, succumbing to one of them. Respiration ceased and cyanosis developed rapidly. The heart, however, continued to beat regularly and the pulse could be felt at the wrist. The heart sounds became inaudible toward the end of the attacks. At autopsy the only lesion found was a patent ductus arteriosus, which was large enough to allow the passage of a large probe. The second child, aged two weeks, had similar attacks. No murmurs were heard over the cardiac area, but there were signs of bronchitis in the lungs. The child died during an attack, and the patent ductus arteriosus was the only abnormality found. The third child, aged three weeks, had a similar history and had typical attacks of cyanosis with complete inhibition of respiration, requiring artificial respiration for twenty minutes and oxygen and brandy to revive it. Autopsy again showed only patent ductus arteriosus. Most cases are reported as occurring in combination with other forms of congenital heart lesions, especially pulmonary stenosis. The cyanosis is probably due to a deficient aeration of the blood. The systolic murmur heard over the cardiac area, as described in the text-books, was absent in these cases. There was also no sign of obstruction during the intervals of the attack.

Cerebellar Abscess in a Child.—ASHBY (*Brit. Jour. Child. Dis.*, 1915, xii, 105) reports a case of cerebellar abscess in a child aged 4 years; in which the only symptoms were continued headache and listlessness and continued posture of lying on the right side. There was a slight bronchitis and the pulse was slow and irregular. The temperature was normal throughout and the cerebrospinal fluid was not under pressure, was clear, and normal except for a slight excess of lymphocytes and polymorphonuclears. The urine was normal and there had never been any discharge from the ears. Optic neuritis was present and became slowly worse but the pupillary reactions were normal. She was in hospital five weeks and lay in her usual position on the right side maintaining her listless attitude. For the last three weeks she vomited on an average of two or three times a day. After five weeks she had a right-sided convulsion and died. No diagnosis had been made except an improbable one of tuberculous meningitis. On autopsy a large abscess was found in the substance of the right cerebellum. The pus was creamy and contained pneumococci. The

origin of the abscess is not discernible as the ears were normal. The slight bronchitis may have been the starting point. The few localizing symptoms during life were the persistent lying on the right side and the right-sided convulsion. There was no nystagmus or tendency to fall to one side more than another.

The Oculo-cardiac Reflex.—GUNSON (*Brit. Jour. Child. Dis.*, 1915, xii, 97) gives the history of the investigations into the oculo-cardiac reflex and his observations of it in observations with the polygraph in cases of diphtheria and scarlet fever in children under twelve years of age. Observations made by Mackenzie on cases of acute rheumatism were similar to those made by Gunson. This reflex consists of a reflex change in the rate of the heart and often in the rhythm following ocular compression. The path of the reflex is supposed to be along the fifth cranial nerve, medulla and vagus or sometimes the sympathetic. It produces the same cardiac changes as vagus pressure in the neck. When there is no slowing, or actual quickening of the pulse the result is negative. The reflex is positive in normal persons. It is positive in 92 per cent. of children convalescent from diphtheria and scarlet fever. In 8 per cent. the reflex is negative. These are highly nervous cases. In cases of so-called cardiac paralysis the reflex is negative. In cases that recovered the reflex became positive when the heart returned to normal. Among the cardiac results obtained in positive reflexes were, slowing of the whole pulse with stoppage of the heart in some cases as long as four seconds; production of premature contractions, reduction of the a-c interval and in diphtheria cases only complete dissociation of auricles and ventricles. The oculo-cardiac reflex is apparently of no diagnostic importance unless in confirming the nervous origin of postfebrile bradycardias. Gunson claims it does not differentiate cardiac failure from myocardial lesions from that due to nervous lesions since this would presume the independence of the muscular and nervous functions of the heart.

Rupture of the Heart in a Child.—ANDERSON (*Lancet*, 1915, clxxxviii, 647) reports a case of rupture of the heart in a girl five years old and apparently in fair if not good health. A hematoma was found in the left ventricular wall. The cavity was filled with blood and it had ruptured externally into the pericardium. There was an extensive rupture across the inner portion of the posterior wall of the chamber and the torn area almost encircled the ventricle. There was a stenosis of the lumen of both coronary arteries and the left one was obliterated at the seat of rupture. The lymphoid tissue throughout the body was increased in amount and the liver was large and waxy in appearance. Microscopically there was shown increased fibroid tissue through the heart muscle and liver. There was thickening of the vessel walls of the heart with frequent thrombosis. While the explanation of this condition may be that of thrombosis and abnormal development of the coronary arteries, or to necrosis of the heart wall from infarction, still the probable cause, primarily, was a syphilitic endarteritis. Inherited syphilis is a frequent cause of congenital heart disease. The work of Warthin has shown the heart to be a favorite lodging place for the Spirocheta pallida, even when they were not demonstrable